

**CONSTRUCTION PERMIT AND  
ENHANCED NEW SOURCE REVIEW (ENSR)  
OFFICE OF AIR MANAGEMENT**

**Monaco Coach Corporation  
1205 Lincoln Street  
Nappanee, Indiana 46550**

This permit modification is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

|   |                |
|---|----------------|
| Construction Permit No.: CP-039-10442-00087                                 |                |
| Issued by:<br><br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date: |

## TABLE OF CONTENTS

|                    |  |         |
|--------------------|--|---------|
| <b>SECTION A</b>   | <b>SOURCE SUMMARY</b>  | 4       |
| A.1                | General Information  | 4       |
| A.2                | Emission Units and Pollution Control Equipment Summary                     | 4       |
| A.3                | Part 70 Permit Applicability   | 4       |
| <b>SECTION B</b>   | <b>GENERAL CONDITIONS</b>  | 5       |
| B.1                | General Construction Conditions  | 5       |
| B.2                | Effective Date of the Permit [IC13-15-5-3]                                 | 5       |
| B.3                | Revocation of Permits [326 IAC 2-1-9(b)]                                   | 5       |
| B.4                | Permit Review Rules [326 IAC 2]  | 5       |
| B.5                | First Time Operation Permit [326 IAC 2-1-4]                                | 5       |
| B.6                | General Operation Conditions   | 6       |
| B.7                | Preventive Maintenance Plan [326 IAC 1-6-3]                                | 6       |
| B.8                | Malfunction Report [326 IAC 1-6-2]   | 6       |
| B.9                | Transfer of Permit [326 IAC 2-1-6]   | 7       |
| B.10               | Permit Revocation [326 IAC 2-1-9]  | 7       |
| B.11               | Availability of Permit [326 IAC 2-1-3(l)]                                  | 7       |
| <b>SECTION C</b>   | <b>SOURCE OPERATION CONDITIONS</b>   | 8       |
|                    | <b>Emission Limitations and Standards</b>                                  |         |
| C.1                | PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]                       | 8       |
| C.2                | 326 IAC 5 (Opacity Limitations)  | 8       |
| C.3                | Operation of Equipment [326 IAC 2-1-3]                                     | 8       |
|                    | <b>Testing Requirements</b>  |         |
| C.4                | Performance Testing [326 IAC 3-6]  | 8 & 9   |
|                    | <b>Compliance Monitoring Requirements</b>                                  |         |
| C.5                | Compliance Monitoring  | 9       |
| C.6                | Monitoring Methods [326 IAC 3]   | 9       |
|                    | <b>Corrective Actions and Response Steps</b>                               |         |
| C.7                | Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]                  | 9 & 10  |
|                    | <b>Record Keeping and Reporting Requirements</b>                           |         |
| C.8                | Annual Emission Reporting [326 IAC 2-6]                                    | 10      |
| C.9                | Monitoring Data Availability [326 IAC 2-1-3]                               | 10      |
| C.10               | General Record Keeping Requirements [326 IAC 2-1-3]                        | 11      |
| C.11               | General Reporting Requirements [326 IAC 2-1-3]                             | 11 & 12 |
| <b>SECTION D.1</b> | <b>FACILITY OPERATION CONDITIONS</b>                                       |         |
|                    | One (1) wood finishing paint line  | 13      |
|                    | <b>Emission Limitations and Standards</b>                                  |         |
| D.1.1              | Volatile Organic Compounds (VOC) [326 IAC 8-2-12]                          | 13      |
| D.1.2              | General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A] | 13      |
| D.1.3              | Wood Furniture NESHAP [40 CFR 63, Subpart JJ]                              | 13 & 14 |
| D.1.4              | Work Practice Standards [40 CFR 63.803]                                    | 14      |
| D.1.5              | Particulate Matter (PM) [326 IAC 6-3]                                      | 14      |
| D.1.6              | Preventive Maintenance Plan [326 IAC 1-6-3]                                | 15      |

**Compliance Determination Requirements**

|  |    |
|--|----|
| D.1.7 Testing Requirements .....                     | 15 |
| D.1.8 Volatile Hazardous Air Pollutants (VHAP) ..... | 15 |

**Compliance Monitoring Requirements**

|                                     |    |
|-------------------------------------|----|
| D.1.9 Particulate Matter (PM) ..... | 15 |
| D.1.10 Monitoring .....             | 15 |

**Record Keeping and Reporting Requirements [326 IAC 2-1-3]**

|  |         |
|--|---------|
| D.1.11 Record Keeping Requirements ..... | 16      |
| D.1.12 Reporting Requirements .....      | 16 & 17 |

|                                 |           |
|---------------------------------|-----------|
| <b>Semi-Annual Report .....</b> | <b>18</b> |
|---------------------------------|-----------|

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM), and presented in the permit application.

### A.1 General Information

---

The Permittee owns and operates a stationary wood finishing operation.

Responsible Official: Kurt Anderson  
Source Address: 1205 Lincoln Street, Nappanee, Indiana 46550  
Mailing Address: 606 Nelson's Parkway, Wakarusa, Indiana 46573  
SIC Code: 3083  
County Location: Elkhart  
County Status: Attainment for all criteria pollutants  
Source Status: Part 70 Permit Program  
Minor Source, under PSD Rules

### A.2 Emission Units and Pollution Control Equipment Summary

---

This construction permit consists of the following emission units and pollution control devices:

- (a) One (1) wood finishing paint line, located in Plant 48, consisting of the following equipment:
  - (1) One (1) wood prep and clean-up area with a total maximum raw material throughput of 120 units per hour per booth; and
  - (2) Three (3) HVLP paint booths for stain, topcoat and sealer applications, with a total maximum raw material throughput of 120 units per hour per booth and exhausts to stacks designated as SV48-6, SV48-7 and SV48-8.
- (b) One (1) natural gas-fired air make-up unit, with a maximum heat input capacity of 4.8 mmBtu/hr and exhausts to the atmosphere.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

---

This stationary source will be required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).
- (b) This existing source has submitted their Part 70 (T-039-6116-00087) application on May 29, 1996. The equipment being reviewed under this permit shall be incorporated into the Part 70 permit after it is issued. If the facilities listed in this construction permit are not included in the issued Part 70 Operating permit, then the facilities may not be operated until the source files an administrative amendment to the Part 70 Operating permit.

## SECTION B GENERAL CONSTRUCTION AND OPERATION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### Construction Conditions [326 IAC 2-1-3]

#### B.1 General Construction Conditions

---

- (a) The data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may increase allowable emissions, the change must be approved by the Office of Air Management (OAM).

- (b) This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

**B.2 Effective Date of the Permit [IC13-15-5-3]**

---

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

**B.3 Revocation of Permits [326 IAC 2-1-9(b)]**

---

Pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

**B.4 Permit Review Rules [326 IAC 2]**

---

Notwithstanding Condition B.11, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

**B.5 First Time Operation Permit [326 IAC 2-1-4]**

---

This document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

**Operation Conditions**

**B.6 General Operation Conditions**

---

- (a) The data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
- (b) The Permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC13-17) and the rules promulgated thereunder.

**B.7. Preventive Maintenance Plan [326 IAC 1-6-3]**

---

Pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:

- (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
- (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
- (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

#### **B.8 Malfunctions Report [326 IAC 1-6-2]**

---

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations and such records shall be kept and retained for a period of three (3) years and shall be made available to the commissioner upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to the commissioner or his appointed representative. Notification shall be made by telephone or telegraph, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment subject to the requirements of 326 IAC 1-6 shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39].

#### **B.9 Transfer of Permit [326 IAC 2-1-6]**

---

Pursuant to 326 IAC 2-1-6 (Transfer of Permits):

- (a) In the event that ownership of this wood finishing paint line is changed, the Permittee or the current owner or operator, shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
- (b) The written notification, as described in Condition B.9(a), shall be sufficient to transfer the permit from the current owner or operator to the new owner.
- (c) The OAM shall reserve the right to issue a new permit.

#### **B.10 Permit Revocation [326 IAC 2-1-9]**

---

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any other cause which establishes in the judgment of the commissioner, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

**B.11 Availability of Permit [326 IAC 2-1-3(I)]**

Pursuant to 326 IAC 2-1-3(I), the Permittee shall maintain the applicable permit on the premises of the source and shall make this permit available for inspection by the commissioner, or other public official having jurisdiction.

**SECTION C SOURCE OPERATION CONDITIONS**

|               |
|---------------|
| Entire Source |
|---------------|

**Emission Limitation and Standards**

**C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]**

- (a) The potential to emit of volatile organic compound (VOC) for the facilities listed in this construction permit, is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply. After the issuance of this construction permit, the source's potential to emit of volatile organic compounds (VOC) shall exceed 250 tons per year and shall be considered a major source.
- (b) Any change or modification which may increase the allowable emissions, potential emissions, or potential to emit, as appropriate, to the following:
  - 1.) 25 tons per year or more (326 IAC 2-1),
  - 2.) 100 tons per year or more, and greater than 10 tons per year for a single HAP or combination HAPs greater than 25 tons per year (326 IAC 2-7),
  - 3.) 250 tons per year or more (326 IAC 2-2),from the equipment covered in this permit must be approved by the Office of Air Management (OAM) before such change may occur.

**C.2 326 IAC 5 (Opacity Limitations):**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the opacity shall meet the following:

- (a) Opacity shall not exceed an average of 40% any one (1) six (6) minute averaging period.
- (b) Opacity shall not exceed 60% for more than a cumulative total of 15 minutes (60 readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a 6-hour period.

---

**C.3 Operation of Equipment [326 IAC 2-1-3]**

All air pollution control equipment listed in this permit shall be in placed or operated at all times that the emission units vented to the control equipment are in operation, as described in Section D of this permit.

**Testing Requirements**

---

**C.4 Performance Testing [326 IAC 3-6]**

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM not later than forty-five (45) days after the completion of the testing. An extension may be granted by the department, if the source submits to IDEM, OAM, a reasonable written explanation for the requested extension not later than five (5) days prior to the end of the initial forty-five (45) day period.

**Compliance Monitoring Requirements**

---

**C.5 Compliance Monitoring [326 IAC 2-1-3]**

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee shall notify:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, no more than ninety (90) days after receipt of this permit, with full justification of the reasons for the inability to meet this date and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.

---

**C.6 Monitoring Methods [326 IAC 3]**

Any monitoring or testing performed to meet the requirements of this permit shall be performed, according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**Corrective Actions and Response Steps**

---

**C.7 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):



- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation.

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

## **Record Keeping and Reporting Requirements**

### **C.8 Annual Emission Reporting [326 IAC 2-6]**

---

Pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.

### **C.9 Monitoring Data Availability [326 IAC 2-1-3]**

---

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing. All observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

**C.10 General Record Keeping Requirements [326 IAC 2-1-3]**

---

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location or the Wakarusa location, and available within one (1) hour upon verbal request of an IDEM, OAM, representative, for a minimum of three (3) years. They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written request.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

**C.11 General Reporting Requirements [326 IAC 2-1-3]**

---

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any report shall be submitted within thirty (30) days of the end of the reporting period.
- (d) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) an excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) an emergency as defined in 326 IAC 2-7-1(12); or
  - (3) failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (e) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (f) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

## SECTION D.1

## FACILITY CONDITIONS

- (a) One (1) wood finishing paint line, located in Plant 48, consisting of the following equipment:
  - (1) One (1) wood prep and clean-up area with a total maximum raw material throughput of 120 units per hour per booth; and
  - (2) Three (3) HVLP paint booths for stain, topcoat and sealer applications, with a total maximum raw material throughput of 120 units per hour per booth and exhausts to stacks designated as SV48-6, SV48-7 and SV48-8.
- (b) One (1) natural gas-fired air make-up unit, with a maximum heat input capacity of 4.8 mmBtu/hr and exhausts to the atmosphere.

## Emissions Limitation and Standards

### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

---

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet coating), the surface coatings applied to wood furniture and/or wood components shall utilize one or more of the following application methods:

|                                  |  |
|----------------------------------|--|
| Airless Spray Application        | Air-Assisted Airless Spray Application |
| Electrostatic Spray Application  | Electrostatic Bell or Disc Application |
| Heated Airless Spray Application | Roller Coating                         |
| Brush or Wipe Application        | Dip-and-Drain Application              |
| High Volume Low Pressure HVLP    | Aerosol Spray Cans                     |

High volume low pressure spray is an acceptable alternative application of air-assisted airless spray. High volume low pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

### D.1.2 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

---

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart JJ.

### D.1.3 Wood Furniture NESHAP [40 CFR 63, Subpart JJ]

---

- (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of upon startup.
- (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
  - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
    - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids, as applied; or
    - (B) Use compliant finishing materials in which all stains have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied.

Use compliant finishing materials in which all wash-coats, sealers, topcoats, base-coats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of wash-coats, base-coats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or
    - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
    - (D) Use a combination of (A), (B), and (C).
  - (2) Limit VHAP emissions contact adhesives as follows:
    - (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed one and eight-tenths (1.8) pound VHAP per pound solids, as applied.

- (B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids, as applied.
- (C) As an alternative method to Conditions D.1.3(b)(2)(A) and D.1.3(b)(2)(B), use a control device to limit emissions to one (1.0) pound VHAP per pound solids, as applied.
- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids, as applied.

#### D.1.4 Work Practice Standards [40 CFR 63.803]

The owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum addresses each of the following work practice standards as defined under 40 CFR 63.803:

- (a) Operator training course.
- (b) Leak inspection and maintenance plan.
- (c) Cleaning and wash-off solvent accounting system.
- (d) Chemical composition of cleaning and wash-off solvents.
- (e) Spray booth cleaning.
- (f) Storage requirements.
- (g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
- (h) Line cleaning.
- (i) Gun cleaning.
- (j) Wash-off operations.
- (k) Formulation assessment plan for finishing operations.

#### D.1.5 Particulate Matter (PM) [326 IAC 6-3]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the wood finishing line shall have a PM allowable emission using the following equation:

$$E = 4.10 P^{0.67}$$

Where:

E = rate of emissions in pounds hour;

P = Process weight rate in tons per hour.

#### D.1.6 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

### **Compliance Determination Requirements**

#### D.1.7 Testing Requirements

- (a) Pursuant to 40 CFR 63, Subpart JJ, if the Permittee elects to demonstrate compliance using 63.804(a)(3) or 63.804(c)(2) or 63.804(d)(3) or 63.804(e)(2), performance testing must be conducted in accordance with 40 CFR 63, Subpart JJ and 326 IAC 3-6.
- (b) IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VHAP limit specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### **D.1.8 Volatile Hazardous Air Pollutants (VHAP)**

---

Compliance with the VHAP content and usage limitations contained in Conditions D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

### **Compliance Monitoring Requirements**

#### **D.1.9 Particulate Matter (PM)**

---

The dry filters for particulate matter overspray control shall be properly in place and maintained to ensure integrity and particulate loading of the filters at all times when the wood finishing paint line is in operation.

#### **D.1.10 Monitoring**

---

(a) The Permittee shall implement an operator-training program.

- (1) All operators that perform painting operations or booth maintenance, shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within sixty (60) days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
- (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within one (1) hour for inspection by IDEM.
- (3) All operators shall be given refresher training annually.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

### **Record Keeping and Reporting Requirements [326 IAC 2-1-3]**

#### **D.1.11 Record Keeping Requirements**

---

(a) To document compliance with Condition D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.2 and D.1.3.

- (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
- (2) The HAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
- (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable coating used.
- (4) The VHAP content in weight percent of each thinner used.
- (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.

- (b) To document compliance with Condition D.1.4, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (c) To document compliance with Condition D.1.10, the Permittee shall maintain records of any non-routine maintenance activities performed on particulate emission control devices which have air flows greater than 4,000 cfm.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.12 Reporting Requirements

---

- (a) An Initial Compliance Report to document compliance with Condition D.1.2 and D.1.3 and the Certification form, shall be submitted within sixty (60) days following the compliance date of upon startup. The Initial Compliance Report must include data from the entire month that the compliance date falls.
- (b) A semi-annual Continuous Compliance Report to document compliance with Condition D.1.2 and D.1.3 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

For the first year following the compliance date, the six (6) month period shall begin on the first day of the month after which the operation commences.

- (c) Following the first year of reporting, the semi-annual Continuous Compliance Report shall be submitted on a calendar year basis with the reporting periods ending June 30 and December 31.
- (d) The reports required in (a), (b) and (c) of this condition shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
Semi-Annual Report  
VOC and VHAP usage - Wood Furniture NESHAP**

Source Name: Monaco Coach Corporation  
Source Address: 1205 Lincoln Street, Nappanee, Indiana 46550  
Mailing Address: P.O. Box 465, Wakarusa, Indiana 46573  
Part 70 Permit No.: T-039-6116-00087  
Facility: Surface Coating  
Parameter: VOC and VHAPs - NESHAP  
Limit:  
(1) Finishing operations - 1.0 lb VHAP/lb Solids  
(2) Thinners used for on-site formulation of wash-coats, base-coats and enamels - 3% VHAP content by weight  
(3) All other thinner mixtures - 10% VHAP content by weight  
(4) Foam adhesives meeting the upholstered seating flammability requirements - 1.8 lb VHAP/lb Solids  
(5) All other contact adhesives - 1.0 lb VHAP/lb Solids  
(6) Strippable spray booth material - 0.8 pounds VOC per pound solids

YEAR: \_\_\_\_\_

| Month | Finishing Operations<br>(lb VHAP/lb Solid) | Thinners used for on-site formulation<br>(% by weight) | All other thinner mixtures<br>(% by weight) | Foam adhesives (upholstered)<br>(lb VHAP/lb Solid) | Contact adhesives<br>(lb VHAP/lb Solid) | Strippable spray booth material<br>(lb VOC/lb Solid) |
|-------|--|--|---|--|---|--|
| 1     |  |  |   |  |   |  |
| 2     |  |  |   |  |   |  |
| 3     |  |  |   |  |   |  |
| 4     |  |  |   |  |   |  |
| 5     |  |  |   |  |   |  |
| 6     |  |  |   |  |   |  |



**Indiana Department of Environmental Management  
Office of Air Management**

**Technical Support Document (TSD) for New Construction and Operation  
and Enhanced New Source (ENSr)**

**Source Background and Description**

Source Name: Monaco Coach Corporation  
Source Location: 1205 Lincoln Street, Nappanee, Indiana 46550  
County: Elkhart  
Construction Permit No.: CP-039-10442-00087  
SIC Code: 3083  
Permit Reviewer: Nysa L. James

The Office of Air Management (OAM) has reviewed an application from Monaco Coach Corporation relating to the construction and operation of a wood finishing paint line, consisting of the following equipment:

- (a) One (1) wood finishing paint line, located in Plant 48, consisting of the following equipment:
  - (1) One (1) wood prep and clean-up area with a total maximum raw material throughput of 120 units per hour; and
  - (2) Three (3) HVLP paint booths for stain, topcoat and sealer applications, with a total maximum raw material throughput of 120 units per hour and exhausts to stacks designated as SV48-6, SV48-7 and SV48-8.
- (b) One (1) natural gas-fired air make-up unit, with a maximum heat input capacity of 4.8 mmBtu/hr and exhausts to the atmosphere.

**Stack Summary**

| Stack ID | Operation        | Height<br>(feet) | Diameter<br>(feet) | Flow Rate<br>(acfm) | Temperature<br>(°F) |
|----------|------------------|------------------|--------------------|---------------------|---------------------|
| SV48-6   | wood paint booth | 20               | 2.67               | 10,000              | 70                  |
| SV48-7   | wood paint booth | 20               | 2.67               | 10,000              | 70                  |
| SV48-8   | wood paint booth | 20               | 2.67               | 10,000              | 70                  |

**Recommendation**

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 6, 1998.

## Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (three (3) pages).

## Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

| Pollutant                          | Allowable Emissions<br>(tons/year) | Potential Emissions<br>(tons/year) |
|------------------------------------|------------------------------------|------------------------------------|
| Particulate Matter (PM)            | --                                 | 39.87                              |
| Particulate Matter (PM10)          | --                                 | 39.87                              |
| Sulfur Dioxide (SO <sub>2</sub> )  | --                                 | 0.00                               |
| Volatile Organic Compounds (VOC)   | --                                 | 169.04                             |
| Carbon Monoxide (CO)               | --                                 | 0.4                                |
| Nitrogen Oxides (NO <sub>x</sub> ) | --                                 | 2.1                                |
| Xylene                             | --                                 | 7.02                               |
| Methanol                           | --                                 | 12.40                              |
| Toluene                            | --                                 | 15.74                              |
| Methyl Isobutyl Ketone             | --                                 | 10.82                              |
| Combination of HAPs                | --                                 | 45.98                              |

- (a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3. The new wood finishing paint line shall have PM allowable emissions using the following equation:
- $$E = 4.10 P^{0.67}$$
- Where: E = PM allowable emissions in pounds hour; and  
P = Process weight rate in tons per hour.
- (b) The potential emissions before control are less than or equal to the allowable emissions, therefore, the potential emissions before control are used for the permitting determination.
- (c) Allowable emissions (as defined in the Indiana Rule) of VOC and PM are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.
- (d) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are greater than 10 tons per year and/or the allowable emissions of any combination of the HAPs are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, a construction permit is required.

### County Attainment Status

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for NO<sub>x</sub>, SO<sub>2</sub>, CO and PM<sub>10</sub>. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

| Pollutant       | Emissions<br>(ton/yr) |
|-----------------|-----------------------|
| PM              | 16.22                 |
| PM10            | 8.77                  |
| SO <sub>2</sub> | 0.00                  |
| VOC             | 149.88                |
| CO              | 0.00                  |
| NO <sub>x</sub> | 0.88                  |

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the Part 70 application submitted by the company and CP-039-10299-00087.

### Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

| Pollutant                        | PM<br>(ton/yr) | PM10<br>(ton/yr) | SO <sub>2</sub><br>(ton/yr) | VOC<br>(ton/yr) | CO<br>(ton/yr) | NO <sub>x</sub><br>(ton/yr) |
|----------------------------------|----------------|------------------|-----------------------------|-----------------|----------------|-----------------------------|
| Proposed Modification            | 1.98           | 1.98             | 0.00                        | 169.04          | 0.4            | 2.1                         |
| PSD or Offset<br>Threshold Level | 250            | 250              | 250                         | 250             | 250            | 250                         |

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

## Part 70 Permit Determination

### 326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-039-6116-00087) application on May 29, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application. If the facilities listed in this construction permit are not included in the issued Part 70 Operating permit, then the facilities may not be operated until the source files an administrative amendment to the Part 70 Operating permit.

## Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.
- (b) 40 CFR 63, Subpart JJ [Wood Furniture NESHAP]  
Pursuant to 326 IAC 20-14-1 and 40 CFR Part 63, Subpart JJ:
  - (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of upon startup.
  - (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
    - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
      - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of 0.8 pound VHAP per pound solids; or
      - (B) Use compliant finishing materials in which all stains have a maximum VHAP content of (1.0) pound VHAP per pound solid, as applied.  
  
Use compliant finishing materials in which all wash-coats, sealers, topcoats, base-coats and enamels have a maximum VHAP content of eight-tenths (0.8) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of wash-coats, base-coats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or
      - (C) Use a control device to limit emissions to 0.8 pound VHAP per pound solids; or
      - (D) Use a combination of (A), (B), and (C).
    - (2) Limit VHAP emissions contact adhesives as follows:
      - (A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 0.2 pound VHAP per pound solids.

- (B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one 0.2 pound VHAP per pound solids.
  - (C) Use a control device to limit emissions to 0.2 pound VHAP per pound solids.
- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.
- (c) The owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:
  - (1) Operator training course.
  - (2) Leak inspection and maintenance plan.
  - (3) Cleaning and wash-off solvent accounting system.
  - (4) Chemical composition of cleaning and wash-off solvents.
  - (5) Spray booth cleaning.
  - (6) Storage requirements.
  - (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
  - (8) Line cleaning.
  - (9) Gun cleaning.
  - (10) Wash-off operations.
  - (11) Formulation assessment plan for finishing operations.
- (d) Pursuant to 40 CFR 63, Subpart JJ, if the Permittee elects to demonstrate compliance using 63.804(a)(3) or 63.804(c)(2) or 63.804(d)(3) or 63.804(e)(2), performance testing must be conducted in accordance with 40 CFR 63, Subpart JJ and 326 IAC 3-6.
- (e) To document compliance with 40 CFR Part 63, Subpart JJ, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be complete and sufficient to establish compliance with the VHAP usage limits established in 40 CFR Part 63, Subpart JJ.
  - (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
  - (2) The HAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
  - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable coating used.
  - (4) The VHAP content in weight percent of each thinner used.

- (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (6) The Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (f) An Initial Compliance Report to document compliance with 40 CFR Part 63, Subpart JJ and the Certification form, shall be submitted within sixty (60) days following the compliance date of upon startup. The Initial Compliance Report must include data from the entire month that the compliance date falls.
- (g) A semi-annual Continuous Compliance Report to document compliance with 40 CFR Part 63, Subpart JJ and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

For the first year following the compliance date, the six (6) month period shall begin on the first day of the month after which the operation commences.

- (h) Following the first year of reporting, the semi-annual Continuous Compliance Report shall be submitted on a calendar year basis with the reporting periods ending June 30 and December 31.
- (i) The reports required in (a), (b) and (c) of this condition shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590.

- (c) There are no other NESHAP 40 CFR Part 63 applicable to this facility.

### **State Rule Applicability**

326 IAC 1-5-2 and 326 IAC 1-5-3 (Emergency Reduction Plans):  
Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation.

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP. If after this time, the Permittee does not submit an approvable ERP, then IDEM, OAM, shall supply such a plan.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

The source is subject to 326 IAC 1-5-2 and 1-5-3 because the source's VOC PTE is greater than 100 tons per year.

326 IAC 2-6 (Emission Reporting)

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 10 tons/yr of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 5-1-2 (Opacity Limitations):

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the opacity shall meet the following:

- (a) Opacity shall not exceed an average of 40% any one (1) six (6) minute averaging period.
- (b) Opacity shall not exceed 60% for more than a cumulative total of 15 minutes (60 readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor) in a 6-hour period.

326 IAC 6-3 (Process Operations):

Pursuant to 326 IAC 6-3 (Process Operations), the following applies:

- (a) The new wood finishing paint line shall have PM allowable emissions using the following equation:  
$$E = 4.10 P^{0.67}$$

Where: E = PM allowable emissions in pounds hour; and  
P = Process weight rate in tons per hour.

- (b) The dry filters for particulate matter overspray control shall be in operation at all times when the wood finishing paint line is in operation.
- (c) Weekly inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the spray equipment is in operation.
- (d) Monthly inspections shall be performed of the wood finishing paint line emissions from the stack and the presence of overspray on the rooftops and the nearby ground.
- (e) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (f) Weekly visible emission notations of the wood finishing paint line stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (g) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (h) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (i) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

326 IAC 8-2-12 (Wood Furniture and Cabinet coating):

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet coating), the surface coatings applied to wood furniture and/or wood components shall utilize one or more of the following application methods:

|                                  |  |
|----------------------------------|--|
| Airless Spray Application        | Air-Assisted Airless Spray Application |
| Electrostatic Spray Application  | Electrostatic Bell or Disc Application |
| Heated Airless Spray Application | Roller Coating                         |
| Brush or Wipe Application        | Dip-and-Drain Application              |
| High Volume Low Pressure HVLP    | Aerosol Spray Cans                     |

High volume low pressure spray is an acceptable alternative application of air-assisted airless spray. High volume low pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.



No other 326 IAC 8 rules apply to the wood finishing paint line.

### Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This proposed wood finishing paint line will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act. The concentrations of these air toxics were modeled and found to be (in worst case possible) as follows: The concentrations of these air toxics were compared to the Permissible Exposure Limits (PEL) developed by the Occupational Safety and Health Administration (OSHA). The Office of Air Management (OAM) does not have at this time any specific statutory or regulatory authority over these substances.

| HAP                    | Xylene   | Methanol | Toluene  | MIK      |
|------------------------|----------|----------|----------|----------|
| Concentrations (ug/m3) | 160.4    | 284.0    | 360.4    | 247.4    |
| PEL (ug/m3)            | 435000.0 | 260000.0 | 750000.0 | 410000.0 |
| % PEL                  | 0.04     | 0.11     | 0.05     | 0.06     |

- (b) See attached spreadsheets for detailed air toxic calculations.

### Conclusion

The construction of this wood finishing paint line will be subject to the conditions of the attached proposed **Construction Permit No. CP-039-10442-00087**.

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for New Construction and Operation

Source Name: Monaco Coach Corporation  
 Source Location: 1205 Lincoln Street, Nappanee, Indiana 46550  
 County: Elkhart  
 Construction Permit No.: CP-039-10442-00087  
 SIC Code: 3083  
 Permit Reviewer: Nysa L. James

On January 29, 1999, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Monaco Coach Corporation had applied for a construction permit to construct and operate a wood finishing paint line with control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 2, 1999, Monaco Coach, Inc. submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows (changes are bolded and crossed out for emphasis):

- Comment 1: The throughput for the process described in paragraphs A.2(a) and D.1 should be changed from "throughput of 120 units per hour" to "throughput of 120 units per hour per booth". This error was the result of mis-communication at Monaco and needs to be corrected to reflect actual production capacities and processes.
- Response 1: Condition A.2(a), Emission Units and Pollution Control Equipment Summary located on page 4 of 18, and Condition D.1, Facility Description located on page 13 of 18, are amended to the following (changes are bolded and crossed out for emphasis):
- (a) One (1) wood finishing paint line, located in Plant 48, consisting of the following equipment:
    - (1) One (1) wood prep and clean-up area with a total maximum raw material throughput of 120 units per hour **per booth**; and
    - (2) Three (3) HVLP paint booths for stain, topcoat and sealer applications, with a total maximum raw material throughput of 120 units per hour **per booth** and exhausts to stacks designated as SV48-6, SV48-7 and SV48-8.
- Comment 2: Paragraph B.1(a) would require Monaco to notify IDEM "prior to any proposed change in construction which may affect allowable emissions". This provision is overly broad and beyond IDEM's authority because it would require Monaco to receive prior approval even if the proposed change resulted in a decrease in emissions. For this reason, the second sentence in paragraph B.1(a) should be revised to replace the word "affect" with the word "increase" prior to the phrase "allowable emissions".
- Response 2: Condition B.1(a), General Construction Conditions located on page 5 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (a) The data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may **affect increase** allowable emissions, the change must be approved by the Office of Air Management (OAM).

Comment 3: Paragraph B.8(a) proposes to require Monaco to make certain records available to IDEM "or appointed representative" upon request. 326 IAC 1-6-2(a) states that certain records "shall be made available to the commissioner upon request". The sentence proposed by IDEM does not accurately reflect the requirements of 326 IAC 1-6-2(a). Therefore, paragraph B.8(a) should be revised to accurately reflect the regulation.

Response 3: Condition B.8(a), Malfunctions Report located on page 6 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations **and such records** shall be kept and retained for a period of three (3) years and shall be made available to the ~~Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM)~~ **commissioner** upon request.

Comment 4: The first sentence of paragraph B.8(b) should be deleted and replaced with the following sentence: "When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to the commissioner or his appointed representative." The sentence proposed by IDEM does not accurately reflect the requirements of 326 IAC 1-6-2(a), by requiring the submission of a malfunction reporting form. 326 IAC 1-6-2(a) requires notification by telephone or by telegraph and identifies the information which should be included in the notification. As currently proposed, paragraph B.8(b) would require both notification by telephone or facsimile and submission of a Malfunction Reporting Form. Therefore, paragraph B.8(b) should be revised as discussed above to accurately reflect the regulation.

Response 4: Condition B.8(b), Malfunctions Report located on page 6 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to ~~OAM the commissioner or his appointed representative, using the Malfunction Report Forms (2 pages)~~ **telegraph**, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

Comment 5: The first sentence of paragraph B.8(c), page 6 of 18 should be deleted and replaced with the following sentence: "Failure to report a malfunction of any emission control equipment subject to the requirements of 326 IAC 1-6 shall constitute a violation of 326 IAC 1-6, and any other applicable rules." The sentence as proposed by IDEM does not accurately reflect the requirements of 326 IAC 1-6-2. The sentence as currently proposed would require Monaco to report the failure of any air pollution control equipment, even if that equipment was not subject to the requirements of 326 IAC 1-6. According to 326 IAC 1-6-2(a), a violation of 326 IAC 1-6 would occur only if there was a failure to report a malfunction of air pollution control equipment and the air pollution control equipment which malfunctioned was subject to 326 IAC 1-6.

- Response 5: Condition B.8(c), Malfunctions Report located on page 6 of 18, is amended to the following to reflect the requirements of 326 IAC 1-6-2 in the most accurate manner (changes are bolded and crossed out for emphasis):
- (c) Failure to report a malfunction of any emission control equipment **subject to the requirements of 326 IAC 1-6** shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- Comment 6: Paragraph B.9(a) should be revised to insert the phrase “or the current owner or operator” after the phrase “the Permittee” and before the phrase “shall notify OAM, Permit Branch, within thirty (30) days of the change”. This revision is necessary to accurately reflect the provisions of 326 IAC 2-1-6(a) which allow either the current owner or the current operator at the time of a permit transfer to notify the commissioner.
- Response 6: Condition B.9(a), Transfer of Permit located on page 7 of 18, is amended to the following to reflect the requirements of 326 IAC 2-1-6 in the most accurate manner (changes are bolded and crossed out for emphasis):
- (a) In the event that ownership of this wood finishing ~~operation~~ **paint line** is changed, the Permittee **or the current owner or operator**, shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
- Comment 7: Paragraph B.9(b) should be revised to insert the phrase “described in paragraph B.9(a)” after the phrase “The written notification” and before the phrase “shall be sufficient”. This is necessary to clarify that the written notification mentioned in paragraph B.9(b) refers to the written notification described in paragraph B.9(a). In addition, paragraph B.9(b) should be revised to insert the phrase “or operator” after the phrase “current owner” and before the phrase “to the new owner”. This revision is necessary to accurately reflect the provisions of 326 IAC 2-1-6(a) which allow either the current owner or the current operator at the time of permit transfer to perform the transfer.
- Response 7: Condition B.9(b), Transfer of Permit located on page 7 of 18, is amended to the following (changes are bolded and crossed out for emphasis):
- (b) The written notification, **as described in Condition B.9(a)**, shall be sufficient to transfer the permit from the current owner **or operator** to the new owner.
- Comment 8: Paragraph B.10(e) should be deleted and replaced with the following to more accurately reflect the requirements of 326 IAC 2-1-9(a)(5): “For any other cause which establishes in the judgement of the commissioner, the fact that the continuance of this permit is not consistent with the purposes of 326 IAC 2-1”.
- Response 8: Condition B.10(e), Permit Revocation located on page 7 of 18, is amended to the following (changes are bolded and crossed out for emphasis):
- (e) For any **other** cause which establishes in the judgment of ~~IDEM~~ **the commissioner**, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Comment 9: Paragraph B.11 should be amended to reflect that the operations in Nappanee are supported through Monaco's administrative staff at Wakarusa. The wording under paragraph B.11 should be amended to state "the Permittee shall maintain the applicable permit on the premises of the source or at the company's offices in Wakarusa and shall make this permit available for inspection by the IDEM or other public official having jurisdiction, within one (1) hour.

Response 9: According to 326 IAC 2-1-3(I), "the operator of a permitted source or facility shall maintain the applicable permit on the premises of the facility or source and shall make the permit available for inspection by the commissioner or other public official having jurisdiction". This rule specifically states that the permit must be maintained at the source or facility that is permitted. However, to accurately reflect 326 IAC 2-1-3(I), Condition B.11 is amended to the following (changes are bolded and crossed out for emphasis):

---

B.11 Availability of Permit [326 IAC 2-1-3(I)]

Pursuant to 326 IAC 2-1-3(I), the Permittee shall maintain the applicable permit on the premises of the source and shall make this permit available for inspection by the ~~IDEM~~ **commissioner**, or other public official having jurisdiction.

Comment 10: The last sentence of paragraph C.1(a) should be deleted as this source is not and will not be a major source. Monaco Coach is seeking a permit modification to an existing permit to increase current emission limits of 105 tons per year to 145 tons per year. Adding 145 tons per year to a previous expansion of 24 tons per year, will make this total source at 169 tons per year. This does not represent a major source.

Response 10: This construction permit is not considered a modification to an existing construction permit, but a permit for new construction. The total source-wide VOC emissions prior to this new construction was 149.88 tons per year. These emissions were based on the Part 70 permit application Part 70 application submitted by the company and CP-039-10299-00087, issued February 5, 1999. The VOC potential emissions from the new wood furniture finishing paint line are 169.04 tons per year as detailed on page 2 of 3 of Appendix A (Emissions Calculation Spreadsheets). Based on the new equipment plus the existing equipment, the total source VOC emissions are now 318.92 tons per year. Based on this information, this exceeds the PSD threshold of 250 tons per year and after the issuance of this permit would make this source major for PSD. It is OAM's understanding that the source wishes to take a less than 250 tons of VOC per year limit. As addressed to the source, via phone conversation with Kurt Anderson, this limit would have to be addressed and incorporated in the Title V permit and not this construction permit. The reason for such is because this construction permit is only for the new wood furniture finishing paint line and air make-up unit and not the entire source. The synthetic federal minor limit shall be included in the Title V permit. Based on this limit, which shall be incorporated into the Title V permit, the source will then be considered minor under PSD rules.

Comment 11: The first sentence of paragraph C.1(b) should be deleted and replaced with the following: "Any change or modification which may increase the allowable emissions, potential emissions, potential to emit, as appropriate, to the following:". The revised phrase is necessary because two of the three regulations referenced in the subparagraphs to C.1(b) do not reference "potential emissions".

Response 11: Condition C.1(b), PSD Minor Source Status located on page 8 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (b) Any change or modification which may increase the **allowable emissions**, potential emissions, **or potential to emit, as appropriate**, to the following:
- 1.) 25 tons per year or more (326 IAC 2-1),
  - 2.) 100 tons per year or more, and greater than 10 tons per year for a single HAP or combination HAPs greater than 25 tons per year (326 IAC 2-7),
  - 3.) 250 tons per year or more (326 IAC 2-2),

from the equipment covered in this permit must be approved by the Office of Air Management (OAM) before such change may occur.

Comment 12: Paragraph C.2 should be deleted in its entirety and replaced with the following:

- “(a) Visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
- (b) Visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.”

This revision is necessary to clarify the relationship between the limitation and the relevant time period and to be consistent with 326 IAC 5-1-2(1)(A).

Response 12: On November 1, 1998, 326 IAC 5-1-2 was revised as reflected in Condition C.2 (Opacity Limitations). A copy of this updated rule can be located on IDEM’s web page “[www.state.in.us/idem](http://www.state.in.us/idem)”. Condition C.2 is the most up to date and accurate reflection of 326 IAC 5 (Opacity Limitations).

Comment 13: The first and second sentences in paragraph C.4(b) should be revised as discussed below to accurately reflect the language found in 326 IAC 3-6-4(b). In the first sentence, the word “within” found between the phrases “IDEM, OAM” and “forty-five (45) days” should be replaced with the phrase “not later than”. In the second sentence, the word “Commissioner” located between the phrases “granted by the” and “if the source” should be replaced with the word “department”. Additionally, the word “within” found between the phrases “written explanation” and “five (5) days” in the second sentence should be replaced with the phrase “for the requested extension not later than”.

Response 13: Condition C.4(b), Performance Testing located on page 9 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (b) All test reports must be received by IDEM, OAM ~~within~~ **not later than** forty-five (45) days after the completion of the testing. An extension may be granted by the ~~Commissioner~~ **department**, if the source submits to IDEM, OAM, a reasonable written explanation ~~within~~ **for the requested extension not later than** five (5) days prior to the end of the initial forty-five (45) day period.

Comment 14: Paragraph C.7(b) should be revised to replace the phrase “this source” located between the phrases “within 180 days from the date on which” and “commences operation” with the phrase “the wood finishing paint line”. As IDEM is aware, this construction permit is to add a new facility to an existing source. Therefore, this paragraph should be revised to require the submission of the ERP addressing the wood finishing paint line with the commencement of operation of the new facility.

Response 14: Under 326 IAC 1-5-2, "All persons responsible for the operations of a source that has the potential to emit one hundred (100) tons per year, or more, of any pollutant shall prepare, and submit to the commissioner, for approval, written emergency reduction plans consistent with the safety procedures". Based on the rule, Condition C.7(b) is for the entire source and not a specific facility.

Comment 15: The final sentence of paragraph C.7(c) should be deleted in its entirety. 326 IAC 1-5-2 does not contain any provision allowing IDEM to supply an ERP to the source.

Response 15: Condition C.7(c) , Emergency Reduction Plan located on page 9 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP. ~~If after this time, the Permittee does not submit an approvable ERP, then IDEM, OAM, shall supply such a plan.~~

Comment 16: Paragraph C.8 should be deleted and replaced in its entirety with the following:  
"Pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. The annual statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The Permittee shall comply with the applicable requirements of 326 IAC 2-6."

IDEM has previously proposed modifying 326 IAC 2-6 which could change the reporting requirements for sources. Monaco believes the proposed revision is necessary to prevent the possibility that the permit would require reporting requirements which may become inconsistent with the applicable regulation.

Response 16: IDEM, OAM has not changed the reporting requirements of 326 IAC 2-6 at the time of this review. The applicable regulation for the statement submittal, 326 IAC 2-6-3, requires the source to submit by April 15. The minimum requirements needed in this statement are under 326 IAC 2-6-4. The emission statement operating year, December 1 through November 30, is defined under 326 IAC 2-6-2(8).

Comment 17: The second sentence of paragraph C.10(a), should be revised and the word "source" between "kept at the" and "location and available" be changed to "local administrative support". Monaco provides administrative support to this manufacturing facility through their Wakarusa location, located less than 10 miles away. Primary records are not kept at Nappanee location because of the close proximity of the Wakarusa facilities.

Response 17: C.10(a), General Record Keeping Requirements located on page 11 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location **or the Wakarusa location**, and available within one (1) hour upon verbal request of an IDEM, OAM, representative, for a minimum of three (3) years.

They may be stored elsewhere for the remaining two (2) years providing they are made available within thirty (30) days after written request.

Once the Part 70 permit is issued to the source, the source will have to maintain these records at the source's location for a minimum of three (3) years. This requirement for Part 70 permits and is addressed under 326 IAC 2-7-5(3) and 2-7-6.

Comment 18: The citation in the heading for paragraph D.1.1 should be revised to replace the reference 326 IAC 8-2-11 with a reference to 326 IAC 8-2-12.

Response 18: The header is amended from 326 IAC 8-2-11 to 326 IAC 8-2-12.

Comment 19: Paragraph D.1.3(b)(1)(A) should be revised to "one (1) pound of VHAP per pound per solids, as applied" after the phrase "contents across all coatings". First, this is a modification of an existing facility and as such, is subject to the coatings limits for existing sources. Secondly, Table 3 of 40 CFR Part 63, Subpart JJ, specifies that the emission limit for finishing operations can be satisfied by "achieving a weighted average VHAP content across all coatings ..... as applied". Therefore, this revision is necessary to accurately reflect the requirements of 40 CFR Part 63.802(b).

Response 19: Condition D1.3(b)(1)(A), Wood Furniture NESHAP [40 CFR 63, Subpart JJ] located on page 13 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

(A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of ~~eight-tenths one (0.8 1.0)~~ **one (1.0)** pound VHAP per pound solids **as applied**; or

Comment 20: Paragraph D.1.3(b)(1)(B) should be revised to "one (1.0) pound VHAP per pound solids, as applied" after the phrase "maximum VHAP content of". This is a modification of an existing facility and as such, is subject to the coatings limits for existing sources.

Response 20: Condition D1.3(b)(1)(B), Wood Furniture NESHAP [40 CFR 63, Subpart JJ] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

(B) Use compliant finishing materials in which all stains have a maximum VHAP content of (1.0) pound VHAP per pound solid, as applied.

Use compliant finishing materials in which all wash-coats, sealers, topcoats, base-coats and enamels have a maximum VHAP content of ~~eight-tenths one (0.8 1.0)~~ **one (1.0)** pound VHAP per pound solid, as applied. Thinners used for on-site formulation of wash-coats, base-coats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or

Comment 21: Paragraph D.1.3(b)(1)(C) should be revised to "one (1.0) pound VHAP per pound solids" after the phrase "to limit emission to". This is a modification of an existing facility and as such, is subject to the coatings limits for existing sources.

Response 21: Condition D.1.3(b)(1)(C), Wood Furniture NESHAP [40 CFR 63, Subpart JJ] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):



- (C) Use a control device to limit emissions to ~~eight-tenths one (0.8 1.0)~~ pound VHAP per pound solids; or

Comment 22: Paragraph D.1.3(b)(2)(A) should be revised to "one and eight-tenths (1.8) pounds of VHAP per pound per solids, as applied" after the phrase "the VHAP content shall not exceed". This is a modification of an existing facility and as such, is subject to the coatings limits for existing sources. Therefore, this revision is necessary to accurately reflect the requirements of 40 CFR Part 63.802(b).

Response 22: Condition D.1.3(b)(2)(A), Wood Furniture NESHAP [40 CFR 63, Subpart JJ] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed ~~two-tenths one~~ **and eight-tenths (0.2 1.8)** pound VHAP per pound solids.

Comment 23: Paragraph D.1.3(b)(2)(B) should be revised to "one (1.0) pound of VHAP per pound per solids, as applied" after the phrase "the VHAP content shall not exceed". This is a modification of an existing facility and as such, is subject to the coatings limits for existing sources. Therefore, this revision is necessary to accurately reflect the requirements of 40 CFR Part 63.802(b).

Response 23: Condition D.1.3(b)(2)(B), Wood Furniture NESHAP [40 CFR 63, Subpart JJ] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one ~~two-tenths (0.2~~ **1.0)** pound VHAP per pound solids, **as applied**.

Comment 24: Paragraph D.1.3(b)(2)(C) should be revised to "one (1.0) pound of VHAP per pound per solids, as applied" after the phrase "use a control device to limit emissions to". This is a modification of an existing facility and as such, is subject to the coatings limits for existing sources. Also, paragraph D.1.3(b)(2)(C) is an alternative to paragraphs D.1.3(b)(2)(A) and D.1.3(b)(2)(B). This revision is necessary to accurately reflect the requirements of 40 CFR Part 63.802(b).

Comment 24: Condition D.1.3(b)(2)(C), Wood Furniture NESHAP [40 CFR 63, Subpart JJ] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (C) **An alternative method to Conditions D.1.3(b)(2)(A) and D.1.3(b)(2)(B),** use a control device to limit emissions to ~~two-tenths one (0.2 1.0)~~ pound VHAP per pound solids, **as applied**.

Comment 25: Paragraph D.1.3(b)(3) should be revised to add the phrase "as applied" after the phrase "eight-tenths (0.8) pounds VHAP per pound solids". 40 CFR Part 63.802(b)(3) specifies that the emission limit from strippable paint booth coatings can be limited by "using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied". Therefore, this revision is necessary to accurately reflect the requirements of 40 CFR Part 63.802(b)(3).

Response 25: Condition D.1.3(b)(3), Work Practice Standards [40 CFR 63.803] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids, **as applied**.

Comment 26: Paragraph D.1.4 should be revised to replace the word “address” located between the phrases “and at a minimum” and “each of the following work practice” with the word “addresses”.

Response 26: Condition D.1.4, Wood Furniture NESHAP [40 CFR 63, Subpart JJ] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

The owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum ~~addresses~~ each of the following work practice standards as defined under 40 CFR 63.803:

- (a) Operator training course.
- (b) Leak inspection and maintenance plan.
- (c) Cleaning and wash-off solvent accounting system.
- (d) Chemical composition of cleaning and wash-off solvents.
- (e) Spray booth cleaning.
- (f) Storage requirements.
- (g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
- (h) Line cleaning.
- (i) Gun cleaning.
- (j) Wash-off operations.
- (k) Formulation assessment plan for finishing operations.

Comment 27: Paragraph D.1.5(a) should be revised to replace “E = PM allowable emissions in pounds per hour” with “E = rate of emission in pounds per hour”. This revision is necessary to accurately reflect the definitions associated with the formula contained in 326 IAC 6-3-2(c).

Response 27: Condition D.1.5, Particulate Matter (PM) [326 IAC 6-3] located on page 14 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the wood finishing line shall have a PM allowable emission using the following equation:

$$E = 4.10 P^{0.67}$$

Where: E = ~~PM allowable~~ **rate of** emissions in pounds per hour;  
P = Process weight rate in tons per hour.

Comment 28: Paragraph D.1.9 should be corrected to replace the word “fiberglass” with “wood finishing” after the phrase “shall be in operations at all times when the...”.

Response 28: Condition D.1.9, Particulate Matter (PM) located on page 15 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

The dry filters for PM control shall be in operation at all times when the ~~fiberglass~~ **manufacturing wood finishing paint** line is in operation.

Comment 29: Paragraph D.1.10 should be deleted in its entirety and replaced with the following:  
“Operators of the spray equipment and particulate control systems will be trained in the proper use and operation of the equipment. Training shall be documented and refreshed annually.”

Response 29: Condition D.1.10, Monitoring located on page 15 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

---

D.1.10 Monitoring

- (a) ~~Weekly inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the spray equipment is in operation. The Permittee shall implement an operator-training program.~~
- (1) **All operators that perform painting operations or booth maintenance, shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within sixty (60) days from the date of permit issuance. All new operators shall be trained upon hiring or transfer.**
- (2) **Training shall include proper filter alignment, filter inspection, filter maintenance, and trouble shooting practices. The training program shall be written and retained on site. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within one (1) hour for inspection by IDEM.**
- (3) **All operators shall be given refresher training annually.**
- (b) ~~Monthly inspections shall be performed of the fiberglass panel manufacturing line emissions from the stack and the presence of overspray on the rooftops and the nearby ground.~~
- (c) ~~Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.~~

Comment 30: Paragraph D.1.11 - Visible Emissions Notations - should be deleted in its entirety.

Response 30: Since the requirements of Condition D.1.10 have been modified to include an operator-training program, Condition D.1.11 (Visible Emissions Notations) is deleted and the following conditions are re-numbered accordingly.

Comment 31: Paragraph D.1.12(c) should be deleted in its entirety because it refers to documentation of compliance with observations and inspections which should be incorporated into the permit.

Response 31: Condition D.1.12(c), now re-numbered as Condition D.1.11(c), Record Keeping Requirements located on pages 15 and 16 of 18, is amended to the following (changes are bolded and crossed out for emphasis):

- (c) To document compliance with Condition D.1.10, the Permitted shall maintain ~~a log of daily overspray observations, weekly and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.~~ **records of any non-routine maintenance activities performed on particulate emission control devices which have air flows greater than 4,000 cfm.**

Comment 32: Paragraph D.1.12(d) should be deleted in its entirety because it refers to documentation of visible emission notations which should not be incorporated into the permit.

Response 32: Condition D.1.12(d), now re-numbered as Condition D.1.11(d), is deleted from the permit and the following is re-numbered accordingly.

Comment 33: The revisions to this permit, which have been previously discussed, should also be made to the corresponding portions of the TSD.

Response 33: The Office of Air Management (OAM) corrects permit errors in the form of a technical support addendum. The original technical support document does not change from the first proposal in order to maintain the integrity of the review process. The technical support document is utilized as a technical tool that allows the source to understand OAM's decision in a more detailed manner. This document is not an enforceable document, but an aid to the source's permit.

Comment 34: The conditions of this permit should apply to the existing wood finishing operations as well as the new wood finishing operation. Monaco would not be able to distinguish between usage of the old and new booths. Monaco intends, and interprets this permit to allow tracking of product usage and emissions for the entire wood finishing operations. Monaco wishes to request a 249 ton per year VOC emission limit for the entire source.

Response 35: This construction permit is for the new wood finishing paint line and the new air make-up unit only. It allows the source to construct and operate the new equipment. The Part 70 program incorporates equipment both old and new into the Title V permit and allows such to continue operating. The record keeping requirements of the VOC usage rate and the VOC emissions calculated for this permit, cover the new equipment listed in this permit only. The source can take a 249 ton of VOC per year source-wide limit and have such incorporated into their Title V permit by one of the following methods:

1. Incorporate the limit into their Title V application and have it issued in their Title V permit - currently in-house; or
2. Submit a source modification request for the 249 ton of VOC per year limit to IDEM/OAM (326 IAC 2-7-10.5).

Upon further review, OAM has made the following changes (changes are bolded and crossed out for emphasis:

1. Condition D.1.9, Particulate Matter located on page 15 of 18, is amended to reflect the modification to Condition D.1.10, as described in Response #29, and is the following (changes are bolded and crossed out for emphasis):

**D.1.9 Particulate Matter (PM)**

---

~~The dry filters for PM control shall be in operation at all times when the fiberglass manufacturing line is in operation.~~ **particulate matter overspray control shall be properly in place and maintained to ensure integrity and particulate loading of the filters at all times when the wood finishing paint line is in operation.**

## Appendix A: Emission Calculations

### Natural Gas Combustion Only

MM Btu/hr 0.3 - < 10

Air Make-up unit

Company Name: Monaco Coach, Inc.

Address City IN Zip: 1205 Lincoln Street, Nappanee, Indiana 46573

CP: 039-10442

Plt ID: 039-00087

Reviewer: NLJ

Date: 12-17-1998

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

4.8

42.0

#### Pollutant

| Emission Factor in lb/MMCF    | PM<br>11.9 | PM10<br>11.9 | SO2<br>0.6 | NOx<br>100.0 | VOC<br>5.3 | CO<br>21.0 |
|-------------------------------|------------|--------------|------------|--------------|------------|------------|
| Potential Emission in tons/yr | 0.3        | 0.3          | 0.0        | 2.1          | 0.1        | 0.4        |

### Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company Name:** Monaco Coach, Inc.  
**Address City IN Zip:** 1205 Lincoln Street, Nappanee, Indiana 46573  
**CP:** 039-10442  
**Plt ID:** 039-00087  
**Reviewer:** NLJ  
**Date:** 12-17-1998

| Material                                      | Density<br>(Lb/Gal) | Weight %<br>Volatile<br>(H2O&<br>Organics) | Weight %<br>Water | Weight %<br>Organics | Volume %<br>Water | Volume %<br>Non-Vol<br>(solids) | Gal of Mat<br>(gal/hour) | Pounds VOC<br>per gallon<br>of coating<br>less water | Pounds VOC<br>per gallon<br>of coating | Potential<br>VOC pounds<br>per hour | Potential<br>VOC pounds<br>per day | Potential<br>VOC tons<br>per year | Particulate<br>Potential<br>ton/yr | lb VOC<br>/gal<br>solids | Transfer<br>Efficiency |
|---|---------------------|--|-------------------|----------------------|-------------------|---------------------------------|--------------------------|--|--|-------------------------------------|------------------------------------|-----------------------------------|------------------------------------|--------------------------|------------------------|
| Stain Blond                                   | 7.0                 | 73.30%                                     | 0.0%              | 73.3%                | 0.0%              | 1.74%                           | 0.35700                  | 5.13   | 5.13                                   | 1.83                                | 43.96                              | 8.02                              | 0.54                               | 294.89                   | 75%                    |
| Stain Dynasty Haze                            | 6.6                 | 99.00%                                     | 0.0%              | 99.0%                | 0.0%              | 0.53%                           | 0.18900                  | 6.54   | 6.54                                   | 1.24                                | 29.68                              | 5.42                              | 0.05                               | 1234.70                  | 0%                     |
| Stain Autumn Haze                             | 6.5                 | 89.00%                                     | 0.0%              | 89.0%                | 0.0%              | 1.28%                           | 0.19100                  | 5.81   | 5.81                                   | 1.11                                | 26.64                              | 4.86                              | 0.53                               | 454.04                   | 0%                     |
| Stain Danish                                  | 7.1                 | 91.60%                                     | 0.0%              | 91.6%                | 0.0%              | 4.58%                           | 0.03500                  | 6.54   | 6.54                                   | 0.23                                | 5.49                               | 1.00                              | 0.08                               | 142.80                   | 0%                     |
| Stain Cherry (Windsor)                        | 6.7                 | 81.20%                                     | 0.0%              | 81.2%                | 0.0%              | 2.05%                           | 0.07500                  | 5.42   | 5.42                                   | 0.41                                | 9.76                               | 1.78                              | 0.33                               | 264.59                   | 0%                     |
| Stain Frost Maple                             | 7.6                 | 84.00%                                     | 0.0%              | 84.0%                | 0.0%              | 4.87%                           | 0.16400                  | 6.41   | 6.41                                   | 1.05                                | 25.23                              | 4.60                              | 0.74                               | 131.61                   | 0%                     |
| Stain-Monaco Off/White                        | 9.1                 | 45.40%                                     | 0.0%              | 45.4%                | 0.0%              | 14.13%                          | 0.13700                  | 4.15   | 4.15                                   | 0.57                                | 13.63                              | 2.49                              | 1.36                               | 29.33                    | 0%                     |
| Stain Spiced Walnut                           | 6.8                 | 74.20%                                     | 0.0%              | 74.2%                | 0.0%              | 1.69%                           | 0.07400                  | 5.02   | 5.02                                   | 0.37                                | 8.92                               | 1.63                              | 0.42                               | 297.24                   | 0%                     |
| Olympic Oak                                   | 6.6                 | 85.20%                                     | 0.0%              | 85.2%                | 0.0%              | 0.33%                           | 0.56600                  | 5.64   | 5.64                                   | 3.19                                | 76.62                              | 13.98                             | 2.07                               | 1709.16                  | 0%                     |
| Sealer Valspar (Precat                        | 7.5                 | 74.00%                                     | 0.0%              | 74.0%                | 0.0%              | 19.30%                          | 2.67000                  | 5.54   | 5.54                                   | 14.78                               | 354.70                             | 64.73                             | 16.83                              | 28.68                    | 0%                     |
| Valspar Topcoat (Precat)                      | 7.6                 | 72.50%                                     | 0.0%              | 72.5%                | 0.0%              | 21.00%                          | 2.51000                  | 5.50   | 5.50                                   | 13.79                               | 331.05                             | 60.42                             | 16.61                              | 26.17                    | 0%                     |
| Solvent Blend                                 | 6.6                 | 100.00%                                    | 0.0%              | 100.0%               | 0.0%              | 0.00%                           | 0.45500                  | 6.59   | 6.59                                   | 3.00                                | 71.96                              | 13.13                             | 0.00                               | --                       | 0%                     |
| Topcoat                                       | 7.6                 | 72.50%                                     | 0.0%              | 72.5%                | 0.0%              | 21.00%                          | 0.06600                  | 5.50   | 5.50                                   | 0.36                                | 8.70                               | 1.59                              | 0.44                               | 26.17                    | 0%                     |
| <b>State Potential Emissions</b>              |                     |  |                   |                      |                   |                                 |                          |  |  | <b>38.57</b>                        | <b>925.68</b>                      | <b>168.94</b>                     | <b>39.57</b>                       |                          |                        |
| <b>Add worst case coating to all solvents</b> |                     |  |                   |                      |                   |                                 |                          |  |  |                                     |                                    |                                   |                                    |                          |                        |

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used

## HAP Emission Calculations

**Company Name:** Monaco Coach, Inc.

**Plant Location:** 1205 Lincoln Street, Nappanee, Indiana 46573

**County:** Elkhart

**Permit Reviewer:** NLJ

**Date:** 12-17-1998

| Material                 | Density<br>(Lb/Gal) | Gal of Mat<br>(gal/unit) | Weight %<br>Xylene | Weight %<br>Toluene | Weight %<br>Methanol | Weight %<br>MIK | Xylene Emissions<br>(ton/yr) | Toluene Emissions<br>(ton/yr) | Methanol Emissions<br>(ton/yr) | MIK Emissions<br>(ton/yr) |
|--------------------------|---------------------|--------------------------|--------------------|---------------------|----------------------|-----------------|------------------------------|-------------------------------|--------------------------------|---------------------------|
| Stain Blond              | 7                   | 0.35700                  | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Stain Dynasty Haze       | 6.6                 | 0.189000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Stain Autumn Haze        | 6.5                 | 0.191000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Stain Danish             | 7.1                 | 0.035000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Stain Cherry (Windsor)   | 6.7                 | 0.075000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Stain Frost Maple        | 7.6                 | 0.164000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Stain-Monaco Off/White   | 9.1                 | 0.137000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Stain Spiced Walnut      | 6.8                 | 0.074000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Olympic Oak              | 6.6                 | 0.566000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Sealer Valspar (Precat)  | 7.5                 | 2.670000                 | 3.70%              | 11.10%              | 7.00%                | 7.00%           | 3.25                         | 9.74                          | 6.14                           | 6.14                      |
| Valspar Topcoat (Precat) | 7.6                 | 2.510000                 | 4.40%              | 7.00%               | 7.30%                | 5.60%           | 3.68                         | 5.85                          | 6.10                           | 4.68                      |
| Solvent Blend            | 6.6                 | 0.455000                 | 0.00%              | 0.00%               | 0.00%                | 0.00%           | 0.00                         | 0.00                          | 0.00                           | 0.00                      |
| Topcoat                  | 7.6                 | 0.066000                 | 4.40%              | 7.00%               | 7.30%                | 0.00%           | 0.10                         | 0.15                          | 0.16                           | 0.00                      |
|                          |                     |                          |                    |                     |                      |                 | <b>7.02</b>                  | <b>15.74</b>                  | <b>12.40</b>                   | <b>10.82</b>              |

### METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs